

Date: Monday, 5/26/2008 1:09:50 PM
 User: Chantal Lavoie

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services			Drawing Name	: PANEL-350 UPPER BULKHEAD		
Job Number	: 39496			Part Number	: D36553		
Estimate Number	: 13100			Drawing Number	: D3655 UNDER REVIEW <i>RD</i> <i>08.05.26</i>		
P.O. Number	:			Project Number	: 00204		
This Issue	: 5/26/2008	S.O. No.	:	Drawing Revision	: A		
Prsht Rev.	: NC			Material	:		
First Issue	: / /	Type	: THERMOFORMING	Due Date	: 5/30/2008		
Previous Run	: 39493			Qty:	4	Um:	Each
Written By	:						
Checked & Approved By	: <i>JDL 08.5.26</i>						
Comment	: Est. Rev. A 07/12/13 DL verified by:DD						

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	MLEXS093F600607	GE PLASTICS LEXAN SHEET
Comment: Qty.: 34.6600 sf(s)/Unit Total: 138.6400 sf(s) GE PLASTICS LEXAN SHEET batch: <i>M10757Y</i> <i>BB</i> <i>08/06/12</i>		
2.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
Comment: HAND FINISHING THERMOFORMING 1) Cut Blanks to fit frame size <i>BB</i> <i>08/06/12 XY</i>		
3.0	THERMOFORMING	THERMOFORMING MACHINE
Comment: THERMOFORMING MACHINE Thermoform as per Dwg. D3655-3 and Folio FTA 017 using tool DT 8985 Dwg. Rev. <i>X</i> <i>BB</i> <i>08/06/13 XY</i> Folio Rev. <i>A</i>		
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
Comment: INSPECT PARTS AS THEY COME OFF MACHINE Visually inspect for proper formation of each part <i>BB</i> <i>08/06/13 XY</i>		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 5/26/2008 1:09:50 PM
User: Chantal Lavoie

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: PANEL-350 UPPER BULKHEAD

Job Number: 39496

Part Number: D36553

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

6.0 HAND FINISH TH HAND FINISHING THERMOFORMING



Comment: HAND FINISHING THERMOFORMING

1) Trim to Finished Dimensions as per dwg D3655

BB 08/06/17 PTO XX

7.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Check dimensions to ensure conformity to drawing tolerances.

BB 08/06/17 XX

8.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

9.0 PACKAGING 1 PACKAGING RESOURCE #1



(4)

Comment: PACKAGING RESOURCE #1

Identify and Stock
Location: PPP

39440

8/4/19

SD

10.0 QC21 FINAL INSPECTION/W/O RELEASE



08/06/23 JJ

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



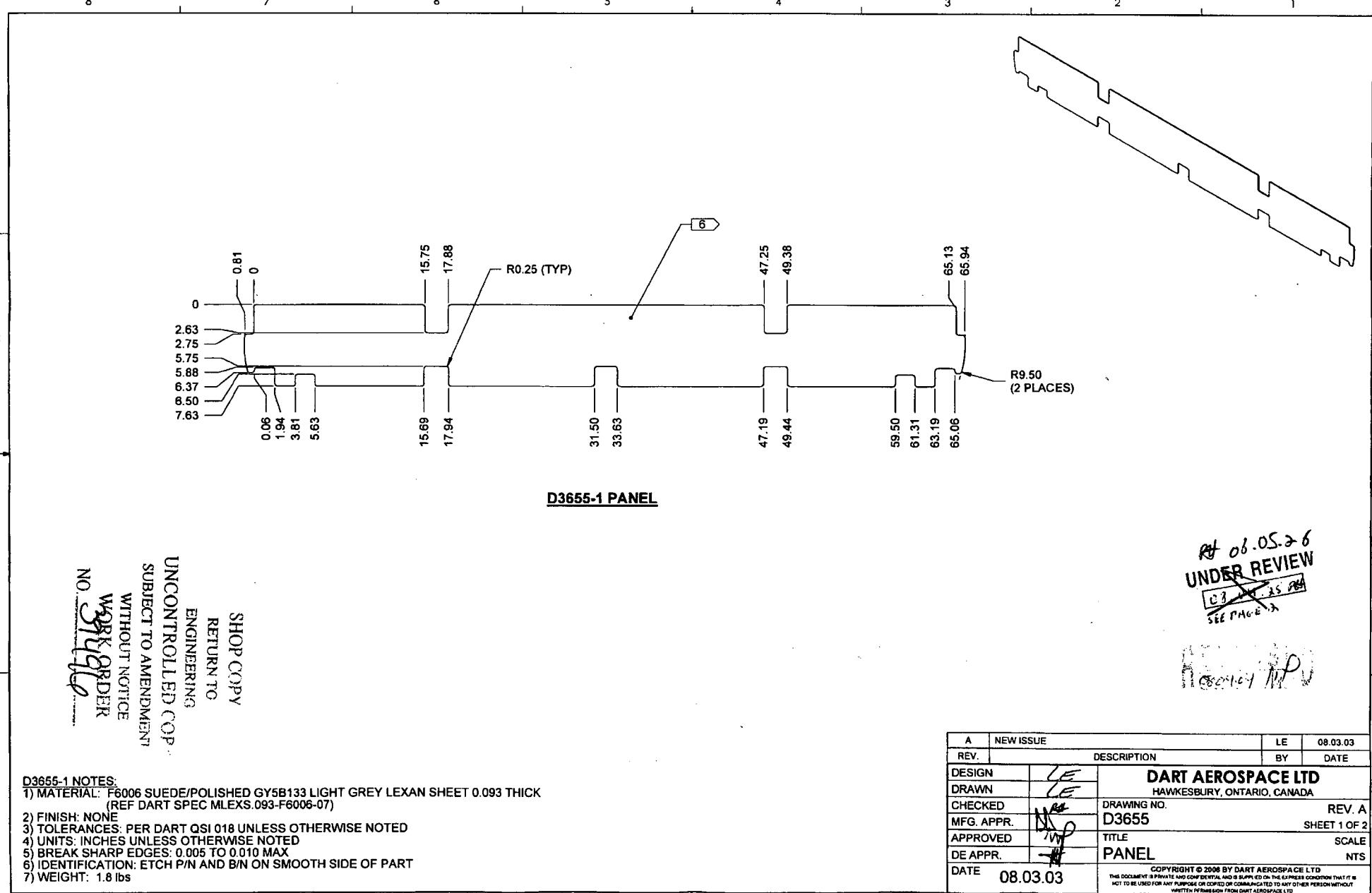
MF 08-06-20

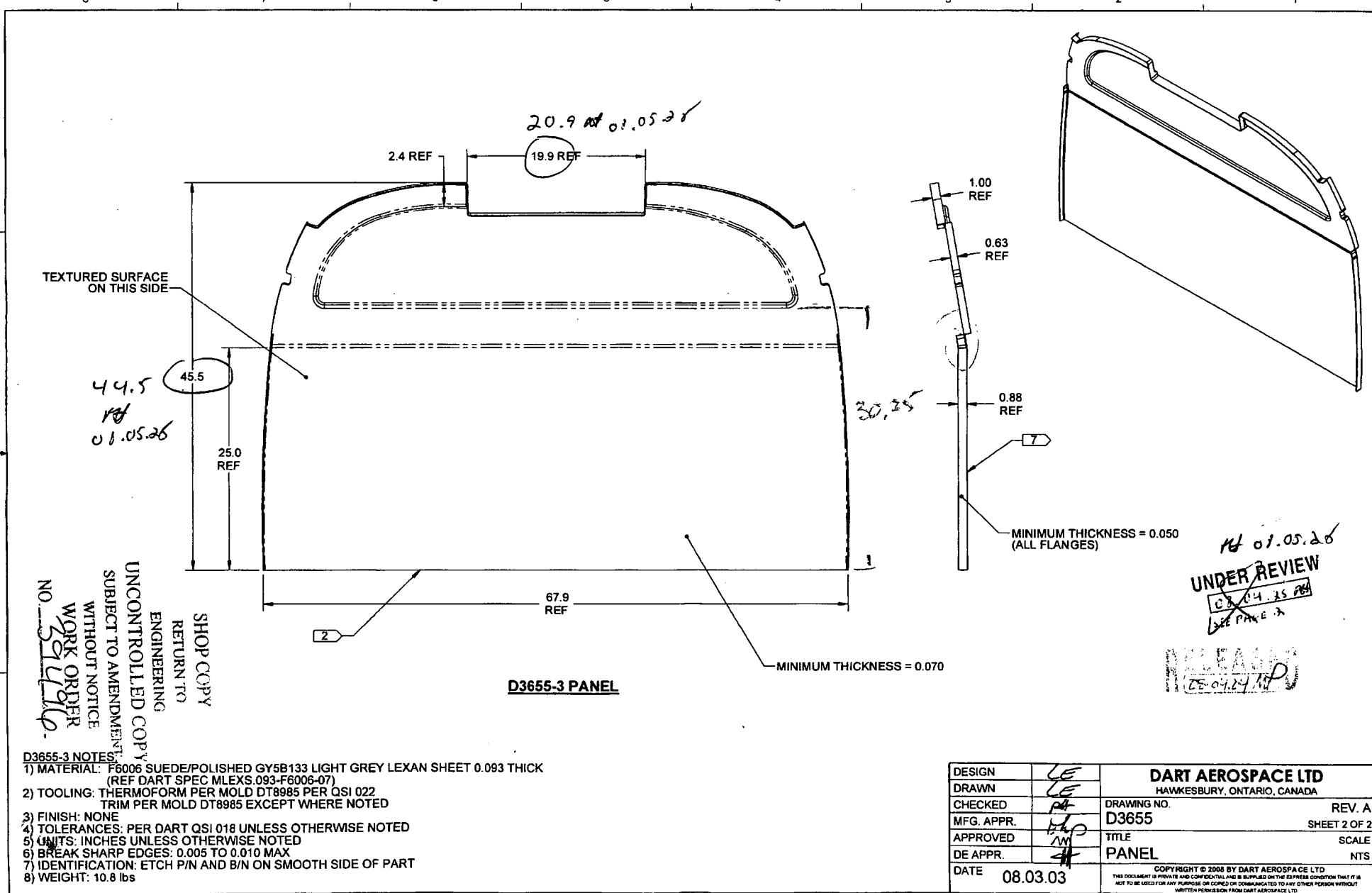
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3655-3 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 08/06/04
 QA: N/C Closed: _____ Date: _____

NCR: <u>39496</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>08.05.06</u>	<u>6</u>	<u>DIMs 19.9 and 45.5 are 20.9 and 44.5</u>	<u>PF 08.05.06</u>	<u>ACCEPTABLE DEVIATION (SEE ATTACHED)</u>	<u>W</u>	<u>08/06/06</u>	<u>PF 08.05.06</u>	<u>S</u>

NOTE: Date & initial all entries





Peter Hum

From: Chris Provencal [cprovencal@dartaero.com]
Sent: April 24, 2008 8:57 AM
To: Peter Hum
Subject: FW: NCR D3655-3

Attachments: Image1.jpg; D3655-RevA.pdf



Image1.jpg (57 KB) D3655-RevA.pdf
(118 KB)

From: David Shepherd [mailto:dshepherd@dartaero.com]
Sent: April 11, 2008 3:31 PM
To: 'Chris Provencal'
Cc: 'Mike Petsche'; 'Leger, Daryl'; 'Bill Beckett'
Subject: FW: NCR D3655-3

Mike/Daryl,

I'm not very happy about this to say the least. We just went through the exercise of making a set of parts, trimming them to templates, conforming them to the drawings, and installing them in an aircraft. How can we have been off by 1"? This is totally unacceptable in my opinion. Someone along the line has dropped the ball. How could we have conformed the parts if they were 1" different than the drawings?

My guess is that all fingers will be pointed to Leanne because she is no longer there to defend herself, but if the drawings were no good, then why did you both sign them???? This is the kind of stuff you should be checking. I cannot do this myself from Calgary.

Now we're going to spend more time and money updating Solidworks models and doing drawing updates. We just certified this. These types of issues should have been sorted out on conformity. That was the whole point.

Chris,

If the parts match what is in the aircraft, they will be acceptable. But I don't think we should make any more without doing a PROPER FAI and checking against the drawing.

David

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Friday, April 11, 2008 7:41 AM
To: dshepherd@dartaero.com
Cc: mpetsche@dartaero.com; D Leger
Subject: NCR D3655-3

David,

For the D3655-3 Panel (350 interiors), the dwg dimension 19.9" is 20.9", dwg dimension 45.5" is 44.5". Ref attached pic. The part was made to the mold. The dwg was evidently created before the mold, and the dimensions were never updated.

The 20.9" width of the 'slot' fits with the mating part correctly; 19.9" would be too small and would have a sloppy fit. A verified this myself.

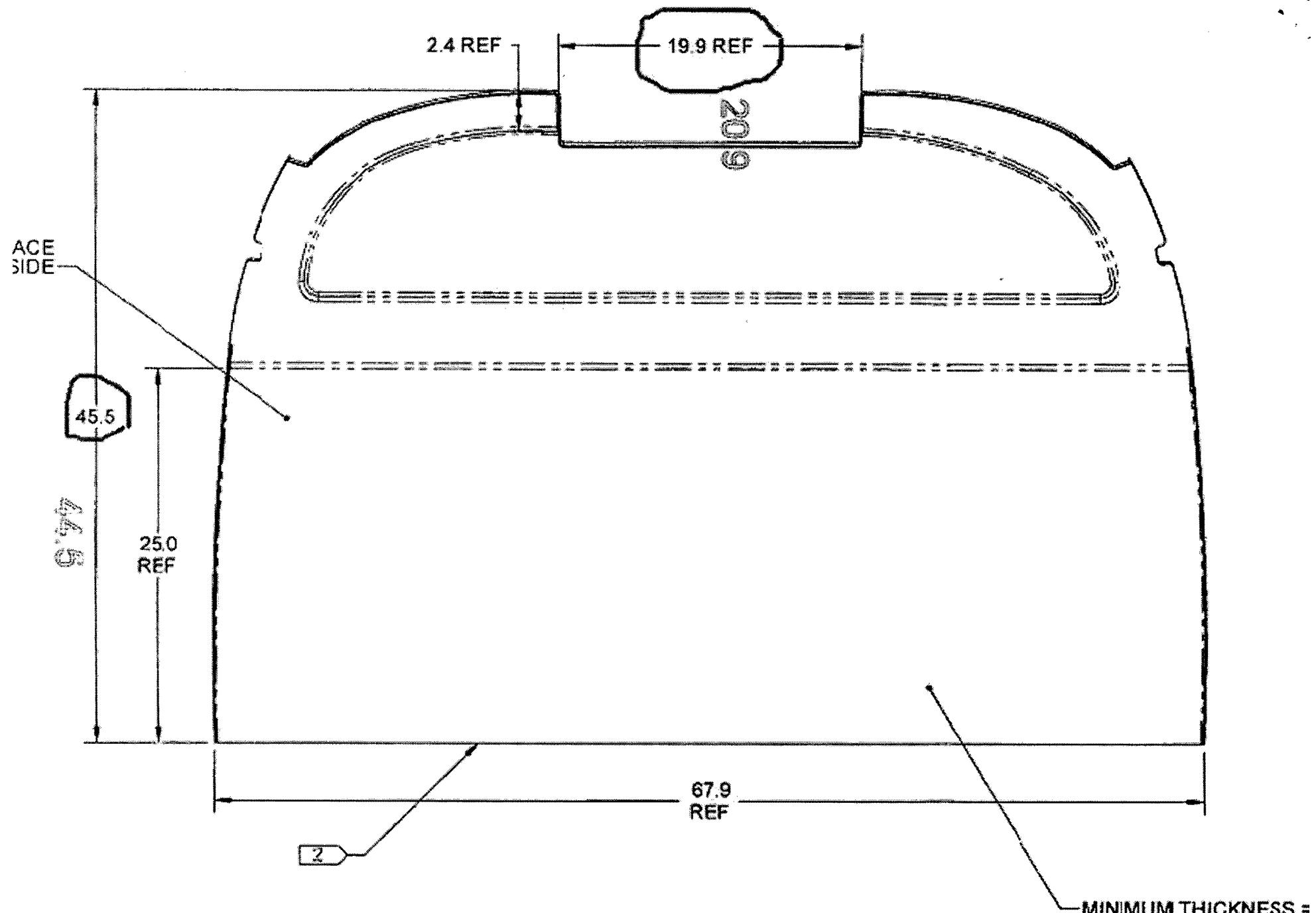
The dwg length of 45.5" is impossible to achieve from the mold. Daryl made the part as long as possible. The parts have evidently been fit into the aircraft and I'm told this dim works.

The dwg obviously needs an update. In the meantime, can we accept this deviation?

-Chris

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.519 / Virus Database: 269.22.11/1371 - Release Date: 4/10/2008
12:23 PM

No virus found in this outgoing message.
Checked by AVG.
Version: 7.5.519 / Virus Database: 269.22.12/1373 - Release Date: 4/11/2008
9:17 AM



D3655-3 PANEL

DART AEROSPACE LTD	WORK ORDER:	37Y96	
Description:Upper Bulkhead	Part Number:	1 D3655	-3
Inspection Dwg: 3655-3 Rev: A		Page 1 of	1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

(Step 4) Thermoforming Visual Inspection Sign-off

Description	Initial
Acceptable shape definition	✓
Free of visual flaws (bumps, cracks, voids, etc.)	✓

(Step 6) Trimming FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. A and record below

Measured by:	B3
Date:	08/06/17

Audited by: ✓ Date: 05/06/18

Prototype Approval:	<i>✓</i>	
Date:	<i>7/9</i>	

Rev	Date	Change	Revised by	Approved by
		New Issue		

DART AEROSPACE LTD	WORK ORDER:	39496.	
Description:Upper Bulkhead	Part Number:	2 D3655- -3	
Inspection Dwg: 3655-3 Rev: A			Page 1 of

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

(Step 4) Thermoforming Visual Inspection Sign-off

Description	Initial
Acceptable shape definition	✓ <i>shape</i>
Free of visual flaws (bumps, cracks, voids, etc.)	✓ <i>visual</i>

(Step 6) Trimming FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. A and record below

Measured by: <u>BD</u>	Audited by: <u> </u>	Prototype Approval: <u> </u>
Date: <u>05/06/17</u>	Date: <u>08/06/18</u>	Date: <u>12</u>

Rev	Date	Change	Revised by	Approved by	Comments
		New Issue			

DART AEROSPACE LTD	WORK ORDER:	39496
Description:Upper Bulkhead	Part Number:	3 D3655-3
Inspection Dwg: 3655-3 Rev: A		Page 1 of

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

(Step 4) Thermoforming Visual Inspection Sign-off

Description	Initial
Acceptable shape definition	✓
Free of visual flaws (bumps, cracks, voids, etc.)	✓

(Step 6) Trimming FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. 4 and record below

Measured by: BB Date: 05/06/17

Audited by:	
Date:	05/06/18

Prototype Approval:	<i>n</i>
Date:	<i>1/1</i>

Rev	Date	Change	Revised by	Approved
		New Issue		

DART AEROSPACE LTD	WORK ORDER:	39496
Description:Upper Bulkhead	Part Number:	4 D3655-3
Inspection Dwg:3655-3 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

(Step 4) Thermoforming Visual Inspection Sign-off

Description	Initials
Acceptable shape definition	✓
Free of visual flaws (bumps, cracks, voids, etc.)	✓

(Step 6) Trimming FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. A and record below

Measured by: <u>BB</u>	Audited by: <u> </u>	Prototype Approval: <u> </u>
Date: <u>08/06/17</u>	Date: <u>08/06/17</u>	Date: <u> / / </u>

Rev	Date	Change	Revised by	Approved
		New Issue		